

Before the
FEDERAL COMMUNICATIONS COMMISSION
 Washington, D. C. 20554

RECEIVED

JUL 19 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of:

Amendment of the Commission's
 Rules to Establish New Personal
 Communications Services

GEN Docket 90-314
 ET Docket No. 92-100

**REPLY COMMENTS OF ROCKWELL INTERNATIONAL CORPORATION
 ON THE WINFORUM SUBMISSION**

Pursuant to Section 1.415 of Federal Communications Commission ("the Commission") Rules and Regulations, Rockwell International Corporation ("Rockwell") hereby submits an original and nine copies of Reply Comments on the recent submission by The Wireless Information Networks Forum ("WINForum") regarding a spectrum etiquette for unlicensed Personal Communication Services ("PCS") that would allow for the effective deployment of unlicensed PCS devices.

1. PRELIMINARY COMMENTS

Rockwell International supports WINForum in its role of developing a spectrum etiquette for the unlicensed PCS band. While Rockwell is a member of WINForum, it was not a member of the technical committee that developed the etiquette proposed in the recent submission. As a member of WINForum, Rockwell is aware of the intense effort that was required to complete the etiquette in the allotted time frame.

No. of Copies rec'd: 0+9
 List A B C D E

Although the WINForum submission of June 21, 1993, is significantly more complete than the May 18 submission, it is still not sufficiently complete to be adopted in its present form.

During the etiquette development, WINForum believed that a dedicated effort on the part of a small group of technical specialists would accelerate the process and result in a set of rules for unlicensed PCS that would be accepted by the industry. We give credit to the extraordinary effort put forth by WINForum in the development of the etiquette, but the resulting document still leaves areas of concern as discussed below.

2. DISCUSSION

In the WINForum submission there is no evidence of the technical trade-offs or the rationale used to develop the etiquette. Such material would be particularly useful in analyzing the etiquette. A concisely written set of rules does not lend itself to a detailed analysis in the time frame allowed by the Commission for Reply Comments.

An important goal of the etiquette should be the ability of a wireless terminal to operate both in the unlicensed and licensed PCS bands. This feature will allow an individual to use the same wireless portable handset or data terminal:

- at home as a cordless phone without service charges

- at work in conjunction with a wireless PBX without service charges
- almost anywhere in the country on a charge-per-call basis in conjunction with a PCS service provider.

This interoperability feature is one of the important characteristics that will distinguish PCS from the existing cellular services available today, increase its market penetration and make it more affordable than cellular.

Unfortunately, the goal of interoperability as stated above is not an articulated objective of the WINForum technical committee developing the spectrum etiquette. Rockwell recommends that the Commission take a firm position on interoperability between the licensed and unlicensed PCS bands. We believe that such a position will assist WINForum in developing future enhancements to the etiquette.

The etiquette and its several pages of introductory explanatory material have been reviewed by technical specialists at Rockwell. We find that it is not possible with the limited information available to answer key technical questions. Specifically, it is not clear whether the etiquette will support certain air interfaces that are under discussion for utilization in the adjacent licensed PCS band such as CDMA (narrowband IS-95 or wideband CDMA as proposed by several manufacturers), TDMA (IS-54, the all-digital IS-7X standard in development or GSM), DECT, CT-2, CT-3 and the PCS air

interface under development by the Joint Technical Committee of Committee T1 and the Telecommunications Industry Association.

3. **CONCLUSION**

Rockwell strongly recommends that continued development of the spectrum etiquette be undertaken in a technical forum that is open to all interested parties for further analysis. In the long run this will be the shortest path to an etiquette that is technically credible and accepted by the industry.

Respectfully submitted,

ROCKWELL INTERNATIONAL CORPORATION

By 

Linda C. Sadler
Manager, Governmental Affairs
Rockwell International Corporation
1745 Jefferson Davis Highway
Arlington, VA 22022
(703)-412-6696

July 19, 1993